THE PERMACULTURE COMMUNITY

LINSA Case Study Report: England

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SUMMARY

The LINSA studied comprises: the project Leaning And Network Demonstration (LAND), its parent body The Permaculture Association (PA), and the wider community of Permaculture practitioners in England. The Permaculture community has originated outside of mainstream agriculture and is operating outside public funding and established policy and knowledge frameworks. It is a diffuse network of individuals, projects and groups all interested in, or practicing, Permaculture (defined broadly as a design system for creating sustainable human environments).

Permaculture has been defined broadly as a design system for creating sustainable human environments. It is an approach to the design of community and agricultural systems according to the principles that mimic ecological systems.

A combination of methods was used in the research including five participatory workshops, 20 interviews, observation at meetings and involvement in telephone conferences, as well as frequent communication.

The Permaculture community has originated outside of mainstream agriculture and is operating outside public funding and established policy and knowledge frameworks. It is a diffuse network of individuals, projects and groups all interested in, or practicing, Permaculture. The PA is a membership organisation of 1200 people which has emerged to facilitate networking and communication and coordinate training in this community. The LAND project is a 4 year project set up with external funding to facilitate networking, learning, demonstration and outreach opportunities.

The network is centralised with stronger bonds between the PA and its members than between the members themselves. The LAND project was set up in response to this weak networking between Permaculture people/plots.

The community has the characteristics of a Community of Practice (CoP) because, as a group Permaculture practitioners share a common set of values and practices, as well as a repertoire (including history, language and resources). There is evidence of situated learning and of the key elements of CoP: mutual engagement, joint enterprise and shared repertoire. As a CoP the community is somewhat insular with a strong identity and an allegiance to the group. This is due to the unique nature of Permaculture and its associated value system. As such there are boundaries around the community which tend to restrict interaction with the mainstream agricultural community and the AKIS.

With respect to innovation, the LINSA can be described as a radical (second order) innovation as it is advocating a paradigm shift from 'business as usual' agriculture, both with respect to the application of Permaculture design principles but also with respect to its vision for lots of smallholders producing food in communities rather than large, individual farm enterprises. It symbolises the features and novelty of grassroots innovations.

The PA has its own knowledge system (KS) which has emerged to meet the needs of practitioners in the absence of any relevant information from the AKIS. The approach to learning combines informal and formal activities which are complementary. Individual learning takes place experientially through practice and observation on holdings. This are validated and reinforced by networking and by taking a set of progressive training courses coordinated by the PA. There is an emphasis on sharing knowledge and there is a distinct knowledge culture surrounding Permaculture characterised by tacit knowledge. This makes it hard to establish links with the AKIS which is underpinned by codified knowledge. Whilst internal learning is strong, external learning is not well developed. Individuals make personal links outside the community and the PA also networks at an organisational level but overall this does no lead to established linkages and partnerships with other communities. Technical knowledge needs are met by the PA, however, there is lack of managerial (marketing, finance, IT etc.) skills amongst practitioners.

PA and LAND, by virtue of bringing together a previously diffuse network of practitioners and providing network and governance structures, has been more effective than the individual sites would have been if they acted independently of one another. However, there are some areas which have not worked so well including outreach to non-Permaculture community. An evaluation of LAND criticised the monitoring as putting too much focus on quantifying outputs by way of justifying the funds spent rather than looking at long term qualitative outcomes. This reveals the difficulty in setting criteria for effectiveness and cost efficiency for LINSA

The community does not currently benefit from any policy support measures. Instead they look for support from charities and sources such as the Local Food Fund (lottery) for funding. They would benefit most from small seed funding to strengthen capacity and allow network and partnership development. Their strength is in an ethos for self-reliance and a desire to be self-sustaining without funding. This might be achieved to some extent through PA membership and training course fees and by using the soft resources of a strong volunteer community.

DEFINITIONS

Agricultural Knowledge System (AKS): The AKS describes institutionalised and formalised tasks of research, education and advice, organizationally reflected in research, education and extension/advisory institutes.

Learning and Innovation Networks for Sustainable Agriculture (LINSA): Networks of producers, customers, experts, NGOs, SMEs, local administrations, as well as official researchers and extensionists, that are mutually engaged with common goals for sustainable agriculture and rural development - cooperating, sharing resources and co-producing new knowledge by creating conditions for communication (Brunori et al., 2013).

Agricultural Knowledge and Innovation Systems (AKIS): this concept seeks to encompass and influence the complexity of knowledge and innovation processes in the rural sphere. It draws on the notion of Agricultural Innovation Systems (AIS) which is defined as 'a network of organisations, enterprises, and individuals focused on bringing new products, new processes, and new forms of organisation into economic use, together with the institutions and policies that affect the way different agents interact, share, access, exchange and use knowledge'. AIS consists of, not just researchers, extension agents and farmers, but all types of public, private and civil society actors, such as inputs and processing industry actors, agricultural traders, retailers, policymakers, consumers and NGOs (EU SCAR, 2012).

1 INTRODUCTION

The LINSA studied comprises: the project Leaning And Network Demonstration (LAND), its parent body The Permaculture Association (PA) and the wider community of Permaculture practitioners. The Learning And Network Demonstration Project (LAND), a four year (2009-2012) PA project to develop a national Permaculture demonstration network in England including Permaculture designed home gardens, community gardens, public spaces, allotments, smallholdings and farms. The Permaculture Association (PA)[1] with a membership of 1200 promotes the understanding of the theory and practice of Permaculture by educating the public, providing individuals and groups with access to advice, support, information and training, and researching Permaculture. The Permaculture community is a loose community of people interested in or practising Permaculture in England. This LINSA has originated outside of mainstream agriculture and is operating outside public funding and established policy and knowledge frameworks. It has developed through bottom up processes and has a distinct ideology; it can be thought of as a grassroots innovation and a social movement.

Permaculture has been defined broadly as a design system for creating sustainable human environments. It is an approach to the design of community and agricultural systems according to the principles that mimic ecological systems (Mollison & Holmgren, 1978; Holmgren, 2002). Permaculture has three underpinning ethics, 12 design principles[2], and a set of design tools. A central theme in Permaculture is the design of ecological landscapes that produce food. As the emphasis is on design principles, it does not prescribe a specific system of food production, although it is often referred to as agro-ecological farming and is commonly associated with perennial plants, agroforestry, organic systems, forest gardening and polyculture. Definitions are broad ranging but all encompass a social and community dimension and some reveal a political ideology[3].

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[1] PA is a registered company with charitable status and education and research objectives, which started in 1983 and was converted into its current legal structure in 2007.

[2] Different sets of principles have been proposed building on those first proposed by Mollison (1985), however the Permaculture Association recognise the 12 design principles set out by Holmgren (2002).

[3] Permaculture is a holistic system of DESIGN, based on direct observation of nature, learning from traditional knowledge and the findings of modern science. Embodying a philosophy of positive action and grassroots education, Permaculture aims to restructure society by returning control of resources for living: food, water, shelter and the means of livelihood, to ordinary people in their communities, as the only antidote to centralized power. [Permaculture Activist 2004:3]

Main aims of the analysis:

- To understand how learning networks emerge and operate in the Permaculture community
- To understand the nature, extent, development and transition of the Permaculture innovation
- To evaluate the LAND project in terms of its effectiveness and cost efficiency
- To examine the constraints and opportunities for linking the Permaculture community to the AKIS and other elements of mainstream agriculture

This LINSA represents one of the 17 case studies in SOLINSA. The individual reports and the synthesis report (Deliverable 4.2a) are available on www.solinsa.net. The results in Section 3 address the main objectives of WP4 while the appendix provides details with respect to analysis of the analytical characteristics (described and analysed further in Deliverable 4.2b).

2 METHODS

This report draws on:

- 20 face to face interviews with LINSA actors, some at LAND centres
- Four participatory workshops with LINSA actors: LAND and PA
- One participatory workshop entitled: *Agro-ecological and conventional food production knowledge systems: making the connections to enhance innovation and learning.* Participants included representatives from: the LINSA, other agro ecological organisations and more mainstream agricultural knowledge providers
- Observation, and participation at three meetings and two tel conferences of the PA Research Advisory Board

The workshops drew on a range of interactive methods. Detailed workshop reports were prepared for each workshop and interviews transcribed.

3 CONSTRAINTS AND OPPORTUNITIES FOR LINSA WITHIN THEIR PARTICULAR CONTEXT AND THE SUPPORT NEEDS FOR SUCCESSFUL LINSA

3.1 Constraints

Insularity & boundaries- The community is part of a wider social movement which advocates using Permaculture as an approach to sustainable living and food production. The community has a distinct belief/value system and this fosters a particular culture and identity which in turn creates some insularity and boundaries around the community. The Permaculture name is seen by some as the biggest barrier, not only because it of its alternative image, but also because the concept is hard to communicate to those outside the community. Because Permaculture is as much about sustainable living and communities (growing food on small plots) as about food *production, there is little common ground with mainstream agriculture.*

Stuck as a novelty innovation- Although the aspirations of Permaculture are radical, there is little evidence of transition beyond being a novelty innovation in the English context. There is no aspiration to upscale or mainstream Permaculture (as with other alternative systems like organic farming) in the conventional sense, with, for example, accreditation/ food assurance schemes. As a movement Permaculture is an important source of new frames, and is influencing individuals by providing alternative networks to which to connect, and trying in a small way to appeal to wider publics, but it is marginal*.*

Diffuse network-- People join the community from very different backgrounds and geographical areas; they have different motivations and engage to different extents with the idea of Permaculture. Consequently the network is diverse and diffuse. Although the PA has been effective in pulling together some elements of this community, some people do not join (or do not re-join after completing a PA training course) and for these there would seem to be very little opportunity for networking. Membership of the PA is therefore not representative of the whole community, and very dynamic. Spontaneous regional networking or local groups is limited. Such networking might provide the basis for development of operational groups (EIP) or becoming members of LAGs within LEADER under the new RDP.

Capacity -The PA has a small number of staff and relies on the goodwill of staff and volunteers for a lot of activities. A certain level of staffing capacity is needed both for the functioning of the LINSA but also for developing it (funding proposals, external networking etc.). Currently the LAND project funds provides this through some key staff costs, when this ends and staff leave capacity will

be reduced. Due to nature of Permaculture and its systemic approach (and the aspirations of the CEO) the PA attempts to cover a number of themes and interests and in this respect is very ambitious, particularly given its limited resources.

Power/reliance on one key person -Although it is a non-hierarchical organisation following the ethos of Permaculture the COE has a particularly central role. He is highly motivated and aspirational and as such is influential in this small organisation. In some senses this prevents others from engaging or taking ownership of ideas. Equally loss of his leadership might mean collapse of the PA as its current structure is fragile.

3.2 Opportunities

- The PA and LAND have provided good networking and learning opportunities. The PA is established and has effective governance and learning structures with a well-coordinated knowledge system answering the needs of the community.
- There is a strong volunteer ethic and an attitude of self-reliance. As such the community would prefer to build capacity with some short term funds but aim to reduce their dependency on external funding in the long term.
- The PA is looking for validation. Its training courses are going to be accredited by the Open College Networks. The Research section of the PA is keen to build up an evidence base for Permaculture and wants to publish results through conventional channels. There are also opportunities to link with the agro ecological research community, which is well respected.
- There is a feeling that 'Permaculture's time has come' the systematic and interdisciplinary approaches which Permaculture advocates are now popular amongst researchers and practitioners. There is also realisation by many people that resources need to be efficiently used (as promoted by Permaculture) and that good quality accessible local food and sustainable living are important. There are opportunities therefore to tap into funds that support this (for health, community, local food etc.).
- Permaculture Scotland and Wales were established with help of PA

3.3 Support needs

- Seed funding to kick start some activities e.g. for:
- research to build up evidence base and therefore credibility;
- developing certain activities which could then become self-sustaining;
- ensure capacity is kept at a level that allows the LINSA to function effectively and develop
- Facilitation and brokerage of links and partnerships to other similar organisations to allow partnerships (operational groups, LAGs etc.) to develop
- Make project and research funds available outside of 'silos' of funding, i.e. for holistic, interdisciplinary projects

- Information about networking opportunities with other organisations including mainstream farming to allow access to different sorts of learning, people, support (e.g. rural development) etc.

4 MECHANISMS OF NETWORK DEVELOPMENT, LEARNING AND INNOVATION PROCESSES AND CONNECTIONS WITH THE FORMAL AKS SYSTEMS

4.1 Mechanisms of network development

The Permaculture community is a diffuse and loosely connected network of individuals interested in Permaculture. The PA formalises and facilitates networking. The PA infers some form of legitimacy to those practicing Permaculture. There are a large number of practitioners who call themselves 'permaculturalists', although to have recognition and credibility it is advantageous to take the Permaculture design course and to be part of the PA network. There is a centralised network with the PA at the centre coordinating communication, research and education. This links a diverse range of members (groups, projects and individuals). There are strong ties between the PA and its members, whereas ties between members are relatively weak and there is little evidence of regional clusters. One aim of the LAND project is to strengthen these weak ties.

There are currently some 50 LAND centres (the project target is 80) linked by the project. The project has dedicated staff and budget and a centralised hub at the PA HQ. The LAND centres provide learning and networking support (design tutorials), events (regional skill sharing, specific training, education working group) and host Group Visits. Entry to the network is controlled by eligibility criteria; there is also a wider network of separate 15-20 'LAND learners' who are progressing towards meeting these criteria and so becoming LAND centres. In this project the process of formalising a previously diffuse network of practitioners has meant that some degree of governance, co-ordination and control has been introduced, both to achieve the project aims and to meet funder accountability needs.

With respect to network structure Permaculture practitioners can be described as being part of a Network of Practice (NoP) or a Community of Practice (CoP)[4] (Wenger et al., 2002), As a group they share practices and values as well as a history, repertoire, discourse and resources. They are bound together by their collectively developed and negotiated understanding of what Permaculture is about. There is evidence of the three core elements of a CoP: mutual engagement joint enterprise and shared repertoire.

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[4]   There is insufficient space here to expand on the distinctions between NoP and Cop but it would seem that CoP is the concept most suited to describe the Permaculture community

4.2 Learning and innovation processes

Individual learning is intimately connected to practicing Permaculture and participating in a CoP. There is evidence of situated learning and sharing learning, both characteristics of a CoP (Wenger, 2000). As a CoP the Permaculture community is somewhat insular and entrenched due to its strong internal ties. This is reinforced by a shared identity and allegiance to each other. Thus there are boundaries around the community which hamper interaction with those outside including the mainstream farming community. The Permaculture name is seen by some as the biggest barrier to communicating with those outside the CoP, not only because it the associated image (it attracts people who want an alternative lifestyle -- sometimes referred to as hippies), but also because the concept is hard to explain. Some 'purists' who insist on a rigid interpretation of Permaculture reinforce this, others prefer not to use the Permaculture name in an attempt to lose this image and break down boundaries. There are therefore tensions within the community. Some boundary processes are operating but links tend to be with like-minded communities who share similar ideals like the Transition Movement.

With respect to innovation, Permaculture can be described as a radical (second order) innovation. It is advocating a paradigm shift from 'business as usual' agriculture – in terms of the design approach but also in terms of land tenure and scale (i.e. the vision is for lots of smallholders in communities rather than large, individual farm enterprises). Its goals in that sense are transformative, in that it reframes how agri-food systems should be organised. Given this Permaculturalists and farmers might be thought to exist in different socio-technical paradigms, with limited boundary crossing.

The Permaculture LINSA is a novelty innovation. It symbolises the features and novelty of grassroots innovations, epitomised by processes of bottom up development, creative experimentation and grassroots action (Seyfang and Smith, 2007). The Permaculture LINSA can be thought of as a network that 'breaks the rules' of dominant socio-technical systems and builds up new social and economic spaces endowed with their own rules, actors and artefacts. With respect to whether the LINSA supports socio-technical transition to sustainability, the LINSA's expansion is fairly limited and appeals to a relatively small group of practitioners who support each other very well internally but are too much more caught up in the process of 'doing Permaculture' rather than thinking about outcomes and the end product. Consequently external coverage is much less visible and does not obviously feed into wider debates about peak oil/ farming transitions.

4.3 Connections with the formal AKIS systems

The PA could be described as having its own knowledge system (KS), with practitioners, staff, experts and trainers operating within set structures using a range of learning mechanisms. This KS has arisen to meet the needs of practitioners in the absence of any relevant information from the AKIS. The functions of LAND to support networking, learning, outreach, volunteering and visits are coincident with those of a KS.

Although the Permaculture community is diverse and individuals use a wide range of information sources they tend to engage principally with those in the same 'alternative' social learning system (e.g. the Agroforestry Trust, the Soil Association, Centre for Alternative Technology, and local transition groups). As such their horizons only extend to the fringes of the conventional AKIS. The PA themselves liaise at a different level working with other national and international PAs, similar NGO organizations and with sympathetic academics. The CEO of the PA and members of the PA Education and Research boards act as boundary spanners, there is evident networking with other organisations, however there are no established partnerships, even with obvious candidates such as the Transition Movement or the Soil Association. Notably none of the LAND/PA actors seem to be familiar with mainstream AKIS research, advisory or educational organisations (or its 'language'). A key function of LAND is outreach but most who visit LAND centres are already practitioners rather than members of the public. It is not consciously exclusionary but reflects the niche content and the CoP characteristics of the LINSA. Internal learning is strong but external learning is weak.

The belief/value system which underpins current research agendas in mainstream AKS, and the associated view of what constitutes credible knowledge, restricts linkages with the Permaculture KS. Also Permaculture's wide ranging aims for 'sustainable living' do not align with the AKIS's narrow focus on food production. LINSA members point out that it is difficult to access some materials from the AKIS such as academic publications due to cost. They perceive this to be part and parcel of the way knowledge is commodified within the AKIS and contrast it to the ethos of sharing knowledge within the Permaculture community.

A number of things however suggest that the situation will become more conducive to linking the Permaculture KS to the AKIS. Mainstream agriculture and Permaculture share problems and goals, both aim for more sustainable food production and recognize the need for a more joined-up/systemic approach. The economic situation for farming also means that some cost saving agro ecological practices might become more appealing to farmers; this is seen as an important bridge and described as an "issue" spanner. LAND/PA want to establish an evidence base for Permaculture and are looking to legitimise the practice through peer reviewed publications. In this sense they intend to use conventional channels of the AKIS (scientific method/credibility) and are looking for validation. Permaculture can also align itself to agroecology which is becoming more acceptable both to farmers and policy makers and has a robust evidence base.

4.4 Learning approaches, methods and tools used in LINSA

The Permaculture ethos fosters a culture of sharing knowledge. This sharing is thought to be a unique element of 'doing' Permaculture. Another key approach to learning is that people do not have to conform to a certain type of practice as long as they adhere broadly to the Permaculture principles, there is no right or wrong way of 'doing Permaculture'.

The approach to learning combines informal and formal activities. Individual learning takes place experientially through practice and observation on holdings. Interacting with other individuals is used to share and validate this learning. Informal and formal networking is important and the PA facilitates both. The PA also provides communication channels, such as a website and newsletters which are key in bringing together and disseminating information. It also hosts events (e.g. Diploma gathering weekend, Convergence bi-annual event). LAND is a project devoted to supporting learning with networking, learning, outreach, volunteering and visits. It hosts skill sharing events and encourages mutual learning amongst practitioners.

Formalized group training is a core element of the PA. It is well developed and seen as a priority activity. Three levels of PA accredited training courses of increasing intensity and length are offered: Permaculture Design Course (PDC), an Introduction to Permaculture Course (IPC) and the Diploma In Applied Permaculture Design. The PDC and the Diploma have had 3500 and 90 students respectively and there are> 100 Permaculture teachers and Diploma tutors. There is planned learning progression, for example, Diploma apprentices aspire to be Diploma graduates, while LAND learners aspire to be LAND centres. PA structures and staff support learning include: LAND Learning Co-ordinator, PA Diploma Co-ordinator, an Education Working Group and a Diploma Working Group. Accreditation is taken seriously and the majority of courses are now accredited through the Open College Network. Although coordinated, teaching on the courses takes a Permaculture approach. It is participatory and based on co-leaning, it is as much cultural as practical (some courses have been described as transformational). Rather than teaching prescriptions, tutors provide the 'tools' for doing Permaculture. As such the relationship between formal training and more tacit learning is complementary. The significance of tacit knowledge to Permaculture members, which circulates in a closed system, means that communication with more formal learning systems (using codified knowledge) is limited. Some have suggested that the training reinforces the 'exclusivity of Permaculture', and as such the boundaries, with those outside. There is also objection by some to the requirement to complete the course to meet edibility requirements for being in LAND, and for being a trainer. Although the formal part of the KS appears to be quite closed, individuals very often extend their personal learning networks by using a range of information sources outside of the PA (see above).

Although the level of personal interaction is low, information is personalised and knowledge is embedded in people. Certain people, notably the founders of Permaculture, and their publications (referred to by some as "bibles") have become mythologised and part of the accepted narrative of Permaculture. There is a core of expert practitioners ('true believers' or 'old timers') who, due to their experience and qualifications, are in a position to confer legitimacy on those practitioners who are still learning. As well as books, the internet (blogs, TED, YouTube, newsletters) provides access to these sources.

4.5 Tasks, roles and emerging quality needs for the knowledge and skills of actors and institutions

The knowledge and skills gaps identified by respondents relate to improving generic management skills rather than specific technical Permaculture practice skills, since these are well catered for by the PA training programme. LAND aims to play a key role in demonstration and outreach and the LAND centres expressed feelings of inadequacy in terms of marketing their sites and having the capacity to conduct successful events and visits. There is also a recognised lack of knowledge at the PA co-ordination level about 'mainstream' agriculture networks, sources of information, support and relevant academic research networks. Course tutors have to meet certain standards before they can teach. As the LINSA operates outside of the AKS, professional agricultural advisory systems are not involved, although some mainstream advisors may be involved in activities that fall under the Permaculture umbrella such as holistic grazing, sustainable soil management.

4.6 Support measures which are most effective and cost efficient

The PA is funded by membership subscription. LAND is funded by a grant of £273,000 from the Big Lottery Fund's Local Food Fund (LFF). LAND funds 3 new and 4 existing part-time staff members including the PA's CEO as LAND Coordinator, a Learning Coordinator and a Network Coordinator. This grant is central to the operation of the LAND network and to PA staffing. In addition the PA has received £66,078.56 of 'In-Kind' contributions since the beginning of the LAND project from volunteers and supporters (a requirement of LAND funding).

LAND, by virtue of bringing together a previously diffuse network of practitioners and providing network and governance structures, has been more effective than the individual sites would have been if they acted independently of one another. According to the funder targets set at the beginning of the project LAND has been effective in that it has recruited 50 centres and enabled networking and learning. However there is some dissatisfaction with some elements of LAND and people still feel 'unconnected' and in need of support. With respect to outreach LAND centres suggest that they have been successful at attracting

those already interested in Permaculture but not successful in engaging with the public or local community more generally.

LAND is a significant project within the PA and has provided staff funding, giving it a critical mass/capacity as well as more public exposure. Arguably without this project funding the PA itself would have suffered, in that it would have remained small and stagnant. It is a model that the PA hopes to roll out to other areas (farming) and UK regions. It has also helped the PA become a platform for growth. LAND aims to be self-sustaining; the 4 year period of funding was intended to establish a network which could sustain itself. In this respect the intended benefits could have justified the funding, however in reality the benefits have been more piecemeal and capacity still needs to be built and supported. As such LAND is still reliant on grant funding to operate.

4.7 Evaluation criteria used for assessing the effectiveness and cost-efficiency of support measures that are exploited by LINSA

There are five main outcomes for the LAND project which have been agreed with the funders and progress is monitored against these: Network, Learn, Outreach, Visit and Volunteer. There is internal monitoring and evaluation (M&E) against the funder's quantitative targets (e.g. number of visitors and number of volunteer opportunities). Figures suggest that in terms of outputs, targets set by funders had been reached or exceeded within 3 years of funding, however assessing the qualitative outcomes of improved learning and capacity building has not been possible. LAND emphasises setting up a learning network which can be low-cost and self-sustaining and focuses on train the trainer and increasing the quality and capacity of its educational outreach and communication – again measuring the success of this 'legacy' approach is not easy to determine.

There has been an external evaluation by the LFF and criteria were framed around project aims, project themes, legacy and additionality. This was a favourable evaluation but noted the difficulty in finding suitable criteria, as, although the project is about establishing a new demonstration network, which can be enumerated, it is also concerned with quality of knowledge, teaching skills and provision of experiences for volunteers which is not easy to quantify. They concluded that there has been too much focus on quantifying outputs by way of justifying the funds spent rather than looking at long term qualitative outcomes.

4.8 Operational tools that AKS actors could use to improve support for LINSA and to enhance the capacity of involved actors, in order to foster successful LINSA

LAND and PA themes relate to a number of policy areas including improving access to high quality local food, enabling communities to manage land sustainably for growing food locally, enabling communities to build knowledge and understanding, to celebrate the cultural diversity of food, and promoting awareness and understanding of the links between food and healthy lifestyles.

This LINSA does not currently benefit from any policy support measures. Instead they look for support from charities and the Local Food Fund (lottery). However increasingly they are finding that their ability to apply for large grants is constrained by their capacity (expertise, effort involved). In this respect smaller sums of funding to kick start or seed activities would be beneficial, particularly as the PA claims that it is seeking to be self-reliant financially. In this respect PA membership fees and a strong volunteer ethos are key.

The PA would not appear to be eligible (but does not know about) for current agricultural/rural development funding sources, although this might change with the new RDPE. Individual Permaculture sites tend not to be registered holdings and are therefore not eligible for traditional agricultural support.

5 CONCLUSION

The distinctive nature of Permaculture underpins the constraints and opportunities to this LINSA's development. Permaculture attracts a diverse set of people with different backgrounds and motivations. At one level they share an interest in applying the (broad ranging) Permaculture principles to the way they live their lives but at another level they are quite unconnected. The intensity of their commitment to Permaculture also differs, some use it to shape their whole lifestyles, and others 'dabble' in elements of it such as 'ecological gardening'. Another distinctive feature is the way the Permaculture principles underpin all the PA's activities such as teaching and learning, governance, research methodologies etc. This also fosters a strong volunteer ethic and an attitude of self-reliance.

Permaculture is a social movement wanting to bring about transformative changes in food production. However there is not much evidence of trying to influence the political sphere – a characteristic of traditional social movements. The LINSA can be thought of as a radical innovation however it is mostly aspirational. With respect to transition it is still at the novelty level with little sign of developing further. It is constrained by strong internal learning and cohesion but weak external learning and little engagement with, or exposure to, other communities. The LINSA shows little interest in outcomes or products of Permaculture (such as food for consumers) but focuses more on the processes of 'doing' Permaculture. There appears to be little interest in 'mainstreaming' Permaculture practice as this would involve compromising the vision for an alternative model of community centred food production.

There is evidence of some boundary processes. The PA is a vehicle for building bridges. It is looking for validation through accredited training courses and building up an evidence base for Permaculture to 'prove that Permaculture works'. The Permaculture name is seen by some as the biggest barrier to bridging boundaries since the concept is hard to communicate to those outside the community.

With landscape changes (peak oil etc., changed attitudes and policies) with concerns about using resources efficiently, there is a feeling that 'Permaculture's time has come'. The systemic and interdisciplinary approaches which Permaculture advocates are also now popular amongst researchers and practitioners. As such new funding streams that the PA could use are emerging.

The LINSA demonstrates how formalisation of network through a membership led organisation can be effective. The PA and LAND have provided good networking and learning opportunities. The PA is established and has effective governance and learning structures with a well-coordinated knowledge system answering the needs of the community. However, the emphasis on national networking may have come at the cost of developing regional networks. The PA is aspirational in terms of what it wants to achieve on behalf of its members. The CEO is a key player; this demonstrates the significance both of motivated

leadership but also highlights the risk (and potential conflicts) of relying on one strong individual.

Support needs include:

- Seed funding to kick start some activities (e.g. for research to build up evidence base and therefore credibility; for developing certain activities which could then become self sustained; to ensure capacity is kept at a level that allows the LINSA to function and develop effectively)
- Facilitate networking with other organisations including mainstream farming to allow access to different sorts of learning, people, support etc.
- Facilitate and broker links and partnerships to other similar organisations
- Makes project and research funds available outside of 'silos' of funding, i.e. for system, interdisciplinary projects

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APPENDIX:ANALYTICAL CHARACTERISTICS

ORIGIN AND FUNCTION

Method: 14 interviews with all Permaculture community, Permaculture Association (PA) and LAND members, 2 workshops with PA and LAND members.

1. How did the LINSA evolve (diverse, emerging) and into what form? (D2.1, section 3)

The Permaculture community has progressively cohered around the Permaculture Association (PA), this community has originated outside of mainstream agriculture and is operating outside public funding and established policy frameworks. A shared frame of reference, a belief in Permaculture ethics, design and practice, and a need to connect with others has helped the network develop, but the PA has formalised and facilitated this process. PA is a registered company with charitable status and education and research objectives, which started in 1983 and was converted into its current legal structure in 2007.

LAND, a 4-year funded project, was launched by the PA in September 2009 following a successful application to the Big Lottery Local Food (LF) fund. The grant application was submitted by the CEO of PA. A survey[5] of PA members identified network development needs (in terms of training, communication systems, sharing understanding, and becoming more visible) as a key thing to be addressed. The PA had 3-400 projects listed in their network, but was unable to encourage visits and guarantee quality. Projects[6] were isolated, struggling with working alone, trying to host visits and deal with volunteers. Also the CEO wanted to direct people to credible examples of Permaculture and lose the 'hippy' associations. The bid was therefore designed to address these issues.

LAND funds 3 new and 4 existing part-time staff members including the PA CEO as LAND Coordinator, a Learning Coordinator and a Network Coordinator. New staff members needed to create some ownership of the

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[5]   Survey Monkey was used to support the proposal for Big Lottery funding and had 280 respondents.

[6]   The diffuse network included local practitioners, demonstration projects will include Permaculture designed home gardens, community gardens, public spaces, allotments, smallholdings and farms

project, which has been (and still is) the CEO's own 'vision'[7]. Following setting up of a website and a newsletter system, eligibility criteria were set and prospective LAND centres were invited to participate: those that were not eligible became 'LAND learners'. Reporting procedures and assessment is done by the land advisory group which provides quality control. In a sense LAND is imposing an artificial network structure on a diffuse group where few informal networking links occurred (in contrast to the usual model which builds up or formalises an existing network). This may explain why LAND members do not feel much ownership for the project. The LAND idea is inspirational, there is an interesting disjuncture between PA rhetoric and individual LAND centre experiences. The aim is that all learning centre people become qualified teachers.

The PA community as a whole could be described as a social movement in that it is a an important source of new frames and is influencing individuals by providing alternative networks to which to connect. It is trying to introduce Permaculture ethos and design issues and frame problems in ways to enhance their salience and appeal to wider publics (Eyerman and Jamison, 1991). However there is not much evidence of trying to influence the political sphere – a characteristic of traditional social movements, although the PA is contesting cultural values and beliefs in promoting a view of alternative systems of production (Pollan, 2007).

2. What are the policy principles, policy instruments and financial arrangements? Do these affect the success of the LINSA? (D2.1, section 4.6)

LAND and PA themes relate to a number of policy principles including improving access to high quality local food, *enabling communities to manage land sustainably for growing food locally, enabling communities to build knowledge and understanding, to celebrate the cultural diversity of food, and promoting awareness and understanding of the links between food and healthy lifestyles. There are no relevant* policy instruments. With respect to financial arrangements the PA is funded by membership subscription. LAND is funded by Local Food[8] - this was the first national grant to be awarded by LF and it is the biggest grant the PA has had. This grant is central to the operation of the LAND network, it

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[7] . In the early stages the Local Food fund provided 2 days consultancy support to help the 3 new staff members in design of monitoring and evaluation and to vision "what success would look like"

[8] Local Food which is part of The Big Lottery Fund's Changing Spaces

also raises the profile of Permaculture. There is reliance on grant money to continue. They look towards funding sources that supports local food (access) and communities (health, environment, education, local food schemes). Sources are restricted to charities and Lottery money, the PA are not eligible, or do not know, about current agricultural/rural development funding sources, although this might change with the new RDPE.

3. What are the tasks and roles of actors and institutions? Are professional advisory services involved?

Key actors in LAND are the 3 main staff, and key actors at the LAND centres are the individuals or project leaders who run the centres and volunteers, as well as the LAND learners. At present LAND is the most significant and the most visible project within the PA and its structures and most of the PA activities are linked to the project. As part of the LAND project the PA has set up the Education Working Group that is currently updating standards, resources and developing new strands of work. This has involved over 60 teachers and apprentices. There is also a LAND advisory board and LAND research panel. Components of LAND include a variety of project support mechanisms, such as learning support (design tutorials), events (skill sharing, training) and a Group Visit Scheme.

4. Has there been any evaluation of effectiveness and cost efficiency of support arrangements? If so what criteria were used?

There has been one evaluation by the LF Fund and criteria were framed around project aims, project themes, legacy and additionality. This was a favourable evaluation but noted the difficulty in finding suitable criteria, as, although the project is about establishing a new demonstration network, which can be enumerated, it is also concerned with quality of knowledge, teaching skills and provision of experiences for volunteers which is not easy to quantify. LAND emphasises setting up a learning network which can be low-cost and self-sustaining and focuses on train the trainer and increasing the quality and capacity of its educational outreach and communication – again measuring the success of this 'legacy' approach is not easy to determine. There is internal monitoring. The monitoring information pack sent to LAND learning centres is to ascertain how many visitors have been to the projects and how many volunteer opportunities have been created as a result of the LAND project. The PA has also undertaken some surveys with LAND centres to gauge satisfaction as well as numbers. The LF fund evaluation pointed out that LAND's internal monitoring was 'all about the money, not about the outcomes'.

Key findings

- LAND was conceived as a project (by one individual – the PA CEO) to connect isolated Permaculture sites which exist within a disconnected diffuse network. It has artificially imposed a structure or network upon an otherwise disconnected set of individuals.
- LAND was the inspiration of one individual, creating ownership of the project both within the staff and within the LAND community is proving difficult.
- The PA community could be thought of as a 'social movement' although there is no (explicit) political agenda.
- Although it aims to be self sustaining, in reality LAND is reliant on grant funding to operate.
- Evaluation criteria need to be concerned with the quality of knowledge exchange, teaching and learning experiences of those taking part. To date there has been a focus on numbers of sites established, visitor numbers and activities.
- Relevant policy principles include: access to local affordable high quality food, community development and healthy lifestyles.

References

Eyerman and Jamison, 1991 – see Deliverable 2.1

Pollan, 2007 – see Deliverable 2.1

Permaculture Association Strategic Plan 2011–2018 www.Permaculture.org.uk/

SCALE

Method: 14 interviews with all Permaculture community, Permaculture Association (PA) and LAND members, 2 workshops with PA and LAND members.

The LINSA has three network levels, the wider diffuse Permaculture community (1) which includes all those people practising or interested in some aspects of Permaculture in England, within this network is a smaller more formalised network of Permaculture Association (PA) members (2), and within this there is a yet smaller network of LAND centre actors coordinated by the PA (3). Our analysis has focused on the PA and LAND however each network level is dealt with separately here.

1. What type of "association" is the LINSA?: Degree of formality; degree of complexity; diversity of actors involved: types and role in the network; approximate number of nodes; geographical coverage; diversity of activities performed

With respect to the *wider Permaculture community network* (1) this is a nation-wide diffuse network. Although there is little data it would appear that this is the most diverse of all the networks in terms of the actors and diversity of activities and the most complex in terms of numbers of nodes and types of linkages. With respect to *transactional* content (Tichy et al., 1979*)***,** exchange of affect (liking, friendship), exchange of information and, locally, exchange of produce are the key elements exchanged. The *nature of the links* is low intensity; there is no formalisation and as such there is little expectation between members in terms of appropriate behaviour. This network represents the 'pool' of people form which PA members come.

The *Permaculture Association (PA) network* (2) is a formal England wide network (a registered charity) of diverse members (1200 individual, 67 groups, and 18 businesses - amongst these there are some 500 community level projects, farms and smallholdings). As a registered charity and association it is formalised with structures, hierarchies and rules. As with the wider network members (and their activities) are diverse. PA network members come from a wide variety of backgrounds (planners, policy makers, practitioners, academics). Although the membership numbers remain constant the network is described as fluid as people join and leave the PA each year. People tend to join the PA temporarily when they start practising Permaculture or when they are undertaking a Permaculture Design Course (PDC). When they leave they return to the wider network (1). With respect to *transactional content* primarily this is focused on exchange of information through the website (used by over 10,000 a week by people in over 90 countries), a monthly

e-bulletin (5000 subscribers) and telephone and email support (to >3000 people a year). There is also exchange of services in that PA coordinate training courses (100 trainers, 3500 PDC graduates and 90 Diploma holders). The *nature of the links* is of high intensity between members and the PA co-ordinators but low intensity in between members themselves, there is some linkage between members through courses, and events (AGM 100 and Convergence 400 attendees) [9]. There is an expectation (but no obligation) between members that all will to some extent practice Permaculture design. The PA is aiming for 3800-4000 members, and to increase its 10 part-time staff.

LAND (3) is a formalised national network of publicly accessible demonstration sites created by the PA as part of a 4 year funded initiative. The sites provide learning support (design tutorials), events (regional skill sharing, specific training, education working group) and the Group Visit Scheme. There are currently 40 LAND centres across the country but the aim is to recruit a total of 80 by the end of the project (2014). Entry to the network is controlled by eligibility criteria. There is a wider network of separate 15-20 'land learners' who are progressing towards meeting these criteria. As such members are more homogenous than the other two network levels in that they all either meet or are working towards these criteria. With respect to *transactional content* exchange of information is the most likely with centres seeking information from the PA but also disseminating it to public, practitioners and volunteers; exchange of services include providing training courses and group visits. The *nature of the links* between centres is of relatively low intensity but the aim is to improve these using networking events (training and skill sharing). Regional (40 people) and national skill sharing, networking events and training events have been held since the start of the project. As such internal linkages associated with being LAND centre will be stronger than other 2 networks. They are also linked through the web and the monthly bulletin. The rhetoric of the project ("LAND offers the opportunity for long term network expansion, replication, and the spread of understanding") however is not matched by reality and members complain of isolation.

With respect to degree of 'closure' of the networks (Fuchs 2001) all three networks might be described as "tight networks" in that they cohere around shared frames about Permaculture ("loose networks" produce highly unstable social representations). As the PA (and its project LAND) controls the website, the newsletters, validates the training courses and

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[9]   All figures quoted are from PA's Strategic Plan 2011-2018

eligibility criteria for LAND centres it can be said to be in a powerful position in the network.

2. How is the LINSA structured?

The *wider Permaculture community network* (1) is diffuse and complex (3rd level). Indications are that there may be clusters based on locality or on personal contacts, sometimes around key figures or personalities who act as nodes. There are also a number of external linkages with other networks due to the diverse nature of actors involved. As such the network is complex with multiple nodes, although this research has not explored this to any extent.

The *Permaculture Association (PA)* (2) network is centralised with the hub in Leeds. The PA could be described therefore as a 1st level simple network, however some members have made contact with each other through the PA and there is some clustering around a locality or through a shared experience such as a PDC, therefore a 2nd level network might be a more accurate description. In this sense the PA is acting as a connector bringing people in from the periphery of the network and linking them both to the centre and to each other. Some practitioners talk about isolation and appreciate the role the PA plays in connecting them virtually with each other through the website. There are multiple external links, examples include: Permaculture businesses, groups and organisations/ movements (e.g. Soil Association, Agroforestry Trust, Transition movement); publishers; Permaculture Scotland and Permaculture Cymru; ex-trustees and external supporters; international linkages. The PA acts as a boundary spanner providing bridging connections to these other networks. Many of these are part of the wider Permaculture network (1) described above.

The *LAND* (3) network is centralised with the central node in Leeds. This network has been artificially constructed within a project to connect Permaculture sites to the centre (not to each other), rather than emerging out of a set of informal connections. Of the three networks described this is the most simple. It can be characterised as a 1st level simple network with a central node radiating to 40 other nodes. However there may be some 2nd level clusters emerging around local areas or events although as yet there is little evidence for this. There is no formal communication between centres**.** The longer term vision for LAND is to create a 'distributed Permaculture university campus' where each Permaculture project acts as a centre for learning, a hub for research and education, however as yet there is little evidence of this happening. External linkages exist as with the other networks (1, 2) described but with the addition of the general public.

Key findings

- The wider Permaculture network is diverse, fluid and diffuse, and can be described as 3rd level. It is not centralised and there are weak internal links and numerous external links due to the nature of Permaculture and the overlaps with other movements/organisations
- The PA network is formalised centralised and predominately 1st level although there is some clustering so 2nd level description might be more accurate. Membership is fluid. There are strong virtual links to the centre via website and newsletters but less linkage between members (who sometimes meet at events). PA acts as a facilitator and enabler and members appreciate this.
- LAND network is formalised and centralised and entry to it is controlled through eligibility criteria. As a 1st level network it aims to connect Permaculture sites and create hubs of activity. However, members do not interact and tend to operate very much in isolation.

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EXENT OF INNOVATION

Introduction

The integration synthesis report provides a general introduction to Permaculture that does not need to be repeated here. One important point to stress by way of introduction is that this LINSA case study is no longer as focused on LAND as when originally proposed. LAND aims to develop a national Permaculture demonstration network in England, which includes Permaculture designed home gardens, community gardens, smallholdings and farms. The attempt to develop a network of sites that allows Permaculture (as an innovation) to be promoted and better understood is important and part of the case study, but the research has since expanded to include a broader focus on understanding how the wider PA and Permaculture community works as a network of practitioners and, in particular, how Permaculture can form connections with the wider farming community. This latter theme (the link between Permaculture and farming) is relevant to SOLINSA and gives the case study greater dynamism than if solely focused on LAND.

Methods

The methods employed for this innovation synthesis report were as follows: two workshops (both of which employed various participatory techniques to involve and engage participants); three face-to-face interviews (one with the CEO, one with a LAND centre, and one with a non-LAND Permaculture practitioner); various telephone interviews with LAND staff and Permaculture practitioners. Interview and workshop materials were also supplemented with website and document analysis.

Do the LINSA display characteristics of incremental or radical innovations?

Permaculture is a *radical (second order) innovation*. Permaculture is an approach to designing systems modelled on relationships in natural ecosystems. It involves the design of community and agricultural systems according to the principles that mimic ecological systems, where a key element is achieving maximum gain for minimal energy expenditure. It completely changes and challenges the way we think about how food and resources are produced and used, using techniques that promote integrated design and involve using less inputs/resources, including oil. Its goals in that sense are transformative, in that it reframes how agri-food systems should be organised.

The term Permaculture, as it is understood today, was first used by two pioneer Australians during the 1970s, and they went on to develop the

three core ethical principles: care of the earth, care of people, and setting limits to population and consumption and 12 design principles. Although it has an association with counter culture movements and alternative living to really understand Permaculture one needs to engage and transform their thinking in line with these principles/guiding philosophy.

The Permaculture idea then is radical and innovative. The LINSA that we are studying – the Permaculture Association, who promote Permaculture theory and practice in England, and associated practitioners – are radical too in terms of their general perspectives on food production and their approach to knowledge sharing and learning, which is highly participatory and centred around a Permaculture design course and diploma. However, the systems and practices that it draws on, such as agro-forestry, perennial planting and holistic grazing, are already part of the 'portfolio' of sustainable agriculture and not necessarily innovative. The LAND project, which runs for four-years (2009-2012) and is designed to develop a Permaculture demonstration network as a mechanism for disseminating knowledge about Permaculture, is arguably much more *incremental*, in the sense that what is being developed is effectively a set of demonstration sites, similar to other farm demonstration models.

Do the LINSA support socio-technical transition to sustainability?

Permaculture offers ways to potentially produce food in a post peak oil world. To determine how, or indeed whether, it supports that transition requires two perspectives: firstly, it is useful to assess how the Permaculture community supports itself *internally* (i.e. supporting people who are sold on Permaculture and keen to make that transition); and secondly, to reflect where Permaculture sits in terms of *external coverage* and influence regarding debates about peak oil and food, for example.

The interview and workshop materials suggest the LINSA is effective at internal support. The Permaculture Association (PA) is the central hub that promotes Permaculture in the UK and organises various meetings and runs projects to promote and research Permaculture. Permaculture in England comprises a fairly diffuse network of practitioners, especially in some more remote places, and PA acts as an important focal point. The Permaculture design and diploma courses are particularly important mechanism that support and teach people how to practice Permaculture and, once completed, offers credibility and accreditation. It is clear that some practitioners do operate in relative isolation. There is some diversity in the community of practitioners, from those interested in low impact living, for example, to those using Permaculture on a farm. The latter group are much smaller in number. There appears to be some convergence between practitioners who are interested in similar systems

or practices. The Convergence event, a bi-annual conference, is another important event designed to bring practitioners together and to support them in their practice.

Support internally then is evident and visible through different mechanisms. If one takes a more external perspective, in terms of how Permaculture feeds into wider debates about peak oil and supports farming transitions in this context, Permaculture is much less visible. The LAND project in many respects is one attempt to make Permaculture more visible, but what seems to have happened is that the Transition Movement and transition networks (which emerged out of Permaculture) are the ones supporting and informing debates about peak oil and food sustainability. The link between *Permaculture and farming* is not well supported and is limited. This is a boundary that arguably needs to be crossed if Permaculture is to have a greater influence, a limitation that the PA is aware of and looking to overcome. There is some limited boundary work taking place, usually as single initiatives and sometimes not labelled explicitly as Permaculture, which interestingly some interviewees do not necessarily see as a problem or a threat.

Is the LINSA a novelty, a niche or a change in the regime?

The Permaculture LINSA is a *novelty innovation*. Its development is bottom up. It symbolises the features and novelty of grassroots innovations, epitomised by examples and processes of creative experimentation and grassroots action, usually at a practitioner level although as part of a wider community of practice, that Seyfang and Smith (2007) describe. It is evident from the interviews and workshop work that systems and niches exist under the general Permaculture approach (set of principles). For example, those following the Permaculture approach can be involved in holistic grazing, agro-forestry, or polyculture systems. The general Permaculture principles are thus applied to specific systems/niches within the Permaculture niche.

What is significant from the analysis so far is that Permaculture as a novelty has arguably not really gone anywhere. Its expansion is fairly limited and appeals to a relatively small band of practitioners who support each other very well internally but are much more caught up in the process of 'doing Permaculture' rather than thinking about outcomes and end product. At one level this could be seen as a failure, or a grassroots social innovation/novelty that will not lead to change in the regime, but what is clear is that different pathways or offshoots are emerging from Permaculture. These include the well-known transition network and other initiatives, such as regenerative agriculture, which do not use the Permaculture label but retain some of its core principles to re-think food production.

Is the LINSA focused on incremental innovation, mobilising and applying existing knowledge in given contexts, or is it a network that 'breaks the rules' of dominant socio-technical systems and builds up new economic spaces endowed with their own rules, actors and artefacts?

The Permaculture LINSA is very much about building new social and economic spaces. It has its own rules, actors and artefacts. It is clear from the fieldwork so far that there are a large number of practitioners who call themselves 'permaculturalists', although to have recognition and credibility it is necessary to take the Permaculture design and diploma courses and to be part of the PA network and events. Rules and guidelines are thus codified through the courses and through key texts/sources/leading figures in the PA network (both within the UK and internationally).

Within the LINSA then, there are some 'rules' that one should follow to be part of the network. It is also clear from workshop discussions that some refer to core texts that set out the principles of how to do Permaculture and to design their allotment, smallholding or farm. In that sense, one could argue that permaculturalists follow a fairly prescriptive set of rules, although as noted above, there are niches within the niche – e.g. they will be using different systems (e.g. agro-forestry or holistic grazing) and different practices. Permaculture theory thus breaks the rules of dominant knowledge systems but at the same time practitioners follow 'how to do' Permaculture design manuals fairly rigidly, although also exchange learning and practice between one another in very open (social learning) ways.

Are there any things revealed about the level of innovation that were unexpected?

- Permaculture as an innovation does not link very well with farming, which is a weakness and potential opportunity going forward, especially in 'peak oil' contexts –there is a sense that it's time has come. Permaculturalists and farmers in the main exist in different socio-technical paradigms, with limited boundary crossing.
- People find it very difficult to define Permaculture when questioned about what it is and its innovative characteristics; this does not mean it is not innovative but more that it is difficult to translate the holistic vision in simple terms.
- Permaculture does not have much of a 'brand', although it is clear that others are expressing Permaculture principles in different ways (e.g. transition movement); some interviewees

are not bothered about the fact Permaculture ideas are flowing into other movements / labels (in fact some predicted exactly this outcome).

- There is a slight obsession with process and 'how you do' Permaculture, which can often distract practitioners from focusing on bigger questions/outcomes, which perhaps explains why some elements of Permaculture may not extend beyond a very niche/novelty status.
- Most Permaculture seems to take place at very small scales, which perhaps explains why the link with farming to date is limited.

Key findings

- Permaculture is a *radical (second order) innovation*. It is advocating a paradigm shift from 'business as usual' agriculture – in terms of approach but also in terms of land tenure and scale (i.e. the vision is for lots of smallholders in communities rather than large, individual farm enterprises).
- Permaculture offers ways to potentially produce food in a post peak oil world – that is the socio-technical transition to sustainability in focus here.
- Although the Permaculture approach/theory is innovative, the food production systems and practices it advocates using are not necessarily new
- The link between *Permaculture and farming* is not well supported and is limited. However, implicit links are evident, in part because some of the systems and practices used are found in other sustainable agriculture arenas and contexts. For example, some practitioners are using grazing methods that are also experimented with by farmer networks moving towards more pasture-based feeding systems.
- The Permaculture LINSA is a *novelty innovation*. Its development is bottom up. It symbolises the features and novelty of grassroots social innovations.

- Most Permaculture takes place at a very small scale, with only a few farm-level examples. Practitioners tend to follow a similar set of rules/use a similar range of key texts/guides, although there are different systems (i.e. niches within a niche).
- There is a lack of evidence / research to support Permaculture theory and claims, a void which is recognised by PA and was expressed and evident at a workshop on this topic. They are keen to be seen as a creditable alternative/form of food sustainability practice, which explains why things like LAND

have started, as ways to develop some collective standards and standardisation across the network.

DEGREE OF INTEGRATION

LINSA Description: Permaculture draws on the application of ecological theory to analyze the characteristics of a farm, garden, or home site. Common Permaculture practices include the use of <u>polyculture</u> agriculture, perennial plants, rainwater harvesting, and <u>terraforming</u>. The term Permaculture, as it is understood today, was first coined by Australians <u>Bill Mollison</u> and David Holmgren during the 1970s. Permaculture works on three ethical principles Care of the earth, Care of people, and Setting limits to population and consumption and 12 design principles. The Permaculture Association (PA) promotes the understanding of the theory and practice of Permaculture by educating the public, providing individuals and groups with access to advice, support, information and training (it runs a Diploma in Applied Permaculture Design), and researching Permaculture. The Learning And Network Demonstration Project (LAND) is a four year (2009-2012) PA project to develop a national Permaculture demonstration network in England including Permaculture designed home gardens, community gardens, public spaces, allotments, smallholdings and farms.

Method: Workshops (2) and face-to-face interviews (2), one with the CEO and one with a LAND centre, telephone interviews (3), two with LAND staff and one with a practitioner. These were supplemented with documentary analysis as appropriate.

1. What are the mechanisms of network development?

There is a *centralised network* operating both through the PA and through LAND, with the hub based at the Leeds office. This links a diffuse and diverse range of members (groups and individuals) who rarely meet up. Networking and learning facilitated by the PA activities are considered very important by members for gathering information from, and sharing experiences with, like-minded people (at little cost).

2. What are the processes of innovation and learning and how do they occur?

The capacity to freely *share knowledge* about Permaculture practice is thought to be a unique element of 'doing' Permaculture. There is a sense of *collective and social learning*, in that an agreed set of practices has been created over time within social structures in the long term pursuit of a shared enterprise. The *lack of hierarchy* within the PA is seen as a strength and fosters a culture of everyone learning together and experimenting as they go along. Generally people do not have to conform to a certain type of practice as long as they adhere broadly to the Permaculture principles.

Members create knowledge through *shared practice* and this suggests that social learning is taking place. Although the level of personal interaction is low, information is personalised - for example. Permaculture has a long history and as a community a level of *competence* has been established over time. It is generally recognised that to be competent member of a COP one should follow the design principles and the general Permaculture ethos, and attend a Diploma design course.

There is evidence of *mutual engagement* that binds Permaculture practitioners together into a social entity with shared values and norms. Practitioners share a collective understanding of Permaculture and broadly there is a sense that all practitioners are working within the same overall vision and share the same basic philosophy, or same ethical mind-set. However, there is a range of understandings (or lack of understandings) of what Permaculture is. Not everybody believes the same things or agrees with everything, it is communally negotiated.

Permaculture practitioners (and Members of PA) hold each other accountable to a sense of *joint enterprise*, and, as competent members, they contribute to the enterprise. Participants implement the design principles. This makes them accountable both to themselves and to the persons around them. This competence in practising Permaculture is enhanced by undertaking a design diploma; this is part of the "regime of accountability", the set of reified forms (rules, policies, standards, goals) and implicit schemes of interpretation.

A *shared repertoire* is demonstrated by the range of resources that Permaculture practitioners use to negotiate meaning. Most apparent are the set of Permaculture design principles adopted by the PA. The *design diploma* has also been accepted as a sign of credibility of practice and is part of the common currency of the PA. Certain people, notably the founders of Permaculture, and their publications (referred to by some as "bibles") have become mythologised and part of the accepted narrative of Permaculture. Practitioners have a shared history of interpretations which has built up and been shaped over time by the participants themselves. They also have a shared language and discourse reflecting a certain perspective on the world.

3. Should the LINSA be considered as a COP, NOP, constellation of practice, innovation network?

Permaculture practitioners can be described as part of a COP; as a group they share values, expertise and passion for joint enterprise. Workshop participants said they feel a sense of membership of a wider network, and their shared frames and language makes communication easier, they do

not need to explain their reasoning to other practitioners or PA members. Members are committed to a unique practice and philosophy and share a history, repertoire, discourse and resources; they are bound together by their collectively developed and negotiated understanding of what Permaculture is about.

In some senses this diffuse community might be called a *distributed community of practice* (Wenger et al., 2002), in that they do not rely on face to face meetings as their primary vehicle for connecting members. Also they demonstrate a diversity of views, interests and priorities. There may also be an argument for defining Permaculture practitioners as a network of practice (NOP), as they share a common culture, activities, knowledge and identity but do not meet. However, Permaculture practitioners do have a legitimate organisational authority in the PA (which distributed COP do not) and there is an emphasis on competence and practice which is a distinctive feature of a COP. This together with the other features already described would suggest that Permaculture practitioners are best understood as a COP.

There is also a negotiated understanding of what Permaculture means within this diverse group. Some distinguish those practising Permaculture with a 'big P' and a 'small p', the former being more dogmatic, following the principles rigidly, and the latter being more flexible. The more dogmatic could be described as inward-, and backward-looking suggesting an exclusive COP which does not interact with other COPs. Some members believe Permaculture has become a dogma and that it should open up and lose its 'backyard' image, and they do not describe themselves as Permaculture practitioners. So although there is a shared identity which provides a sense of belonging and commitment, it might not be a shared label.

Learning is seen as increasing *participation* in COP, where participation denotes membership and action. Newcomers to Permaculture undertake the diploma and learn from experts ("old timers") remotely through books, magazines etc. and then move from a position of "legitimate peripheral participation" towards the core as they become recognised and more knowledgeable. Newcomers tend to revere the established Permaculture experts and trainers (old timers). In the case of Permaculture the design principles, the diploma and the criteria to become a LAND centre are some of the objects of *reification*.

Boundaries - There appears to be limited interaction with those outside the COP. Some members are involved in groups that share similar ideals like the Transition Movement (NOP). There is no or very limited interaction with communities or networks engaged in conventional agriculture or food production. However, the membership of PA is dynamic and there are several Permaculture people 'under the radar'. New people and new ideas are emerging and helping to cross boundaries. There are 'boundary spanners'.

4. Are there any things revealed about the degree of integration that were unexpected?

There is a focus in all discussions about the *process of doing Permaculture* but little about the outcomes. There was a large emphasis on Permaculture as a belief system, a philosophy, a way of living rather than as a set of practices for food production. There appears to be a lack of vision for and little ambition to 'mainstream' or scale-up Permaculture or generally develop it as an innovation. In fact, there was resistance to this idea from some. Permaculture practitioners are operating outside conventional food production (and belief) systems. Instead, they look to emerging networks such as the Transition Movement as natural allies or pathways for future development.

Key findings

Permaculture practitioners are a group of people informally bound together by shared values, expertise and passion for joint enterprise, i.e. they are a COP. Members share a negotiated but broad collective understanding of Permaculture (mutual engagement). They are accountable to each other and the joint enterprise, and they have a shared repertoire of design principles, diplomas, histories, discourse etc.

- It is generally recognised that to be competent, members should follow the design principles and the general Permaculture ethos, and attend a design diploma course.
- The design principles, the design diploma and the criteria to become a LAND centre are some of the objects of reification.
- There are some tensions between wanting some standardisation of activities (particularly for the public face of Permaculture – LAND) and wanting flexibility.
- The COP is insular. Boundary activities are operating but not to any great extent. There is little interaction with conventional food systems (or AKIS) in this regard.

Definitions and references

Situated Learning

Wenger's (2000) model of situated learning proposed that learning involved a process of engagement in a 'community of practice'. Collective learning results in practices that reflect both the pursuit of enterprises and the attendant social relations. These practices are thus the property of a kind of community created over time by the sustained pursuit of a shared enterprise.

Morgan (2011:101) states that in social learning 'Learners construct their understanding by using and contributing to a range of common resources and, importantly, through active participation in practice'. The Communities of Practice (CoP) model of social learning focuses specifically on the interaction between knowledge, practice and social structures

Communities of Practice

CoPs are "groups of people informally bound together by shared expertise and passion for joint enterprise" (Wenger and Snyder, 2000; p. 139)

Participation 'refers not just to local events of engagement in certain activities with certain people, but to a more encompassing process of being active participants in the practices of social communities and constructing identities in relation to these communities' (Wenger 1999: 4).

Reification refers to the "process of giving form to our experience by producing objects that congeal this experience into 'thingness'".

Boundaries

Boundaries are an important feature of communities and networks of practice. Over time the 'shared history of learning' (Wenger, 1998) which characterises communities and networks creates informal boundaries between those who have participated in that community or network and those who have not.

References

Morgan, S. 2011. Social Learning among Organic Farmers and the Application of the Communities of Practice Framework. Journal of Agricultural Education and Extension Vol. 17, No. 1, 99-112

Wenger, E. 2000. Communities of Practice and Social Learning Systems. Organization, 7(2), pp. 225_246.

Wenger E. C. and Snyder WM, 2000 Communities of Practice: the organisational frontier. Harvard Business Review 139-45

LEVEL OF LEARNING

What is the LINSA's approach to learning?

To what extent, and in what way, is learning coordinated, managed and/or formalised?

Learning is highly coordinated, managed and formalised. Three levels of PA accredited training courses of increasing intensity and length are offered: Permaculture Design Course (PDC), an Introduction to Permaculture Course (IPC) and the Diploma In Applied Permaculture Design (started in 1993). According to the PA Strategic Plan 2010-2013 the PDC has now been attended by over 3500 people, there are > one hundred trainers, > 3500 design course graduates and 90 Diploma holders. There is planned learning progression or learning pathways – for example, Diploma apprentices become Diploma graduates, LAND learners with training become LAND centres. Courses are delivered by Permaculture teachers and Diploma tutors. Structures and staff in place to support learning include: LAND Learning Co-ordinator, PA Diploma Co-ordinator, an Education Working Group and a Diploma Working Group. Accreditation is taken seriously and the majority of courses are (or will be in the near future) accredited through the Open College Network. PA and LAND also hosts knowledge sharing events – e.g., skill sharing events, the Diploma gathering weekend and a Convergence bi-annual event (conference for Permaculture practitioners, trainers and others interested). PA and LAND also provide communication channels, such as websites and newsletters, a part of which involves providing information about learning and training. As noted below, a good deal of learning about Permaculture comes through practice. The training courses and other mechanisms described above help to formalise the process.

What are the tensions between formalised explicit (codified) approaches to learning and non-formalised implicit learning approaches?

The nature of Permaculture means that many people learn experientially on their own sites and there is a significant level of tacit knowledge; however, practitioners seem to welcome the chance to validate this learning by talking to others and undertaking courses and there does not appear to be any conflict. The relationship between formal training and more tacit learning are better described as complementary. The nature of the training courses, which all emphasise co-learning, means that they can be a good experience and, as noted by some workshop participants, transformational. Most older trainers or experts are held in high regard or revered by practitioners. Only one person expressed dissatisfaction with a course during a workshop; however, some also resented criteria or rules associated with entry into LAND – the formalisation of learning.

What are the structures and mechanisms of learning? (Is an AKS structure evident? What are the: communication patterns, communication infrastructures, retrieval information systems, intellectual property rules, validation of information protocols?)

See above. The PA could be described as having its own AKS, with practitioners, staff, experts and trainers using a range of mechanisms. Although the formal part of the AKS appears to be quite closed, individuals very often extend their learning networks by seeking training and using a range of information sources outside of the PA network. They may also take courses offered by other initiatives e.g. Regenerative Agriculture.

Can individual, social and organisational learning be identified? If so can they be separately characterised?

Individual learning takes place experientially through practice and through networking with other individuals (i.e. situated learning). Organisational learning occurs in courses and training and learning events and has a greater degree of formality. Social learning involves the shared learning, values and culture of Permaculture.

3. *What are the emerging needs for knowledge and skills in the LINSA?*

Workshop participants suggested that, while their Permaculture training was well catered for, they lacked skills in management, IT, marketing etc. The knowledge and skills gaps identified were therefore more generic business management skills rather than specific knowledge gaps related to a certain type of Permaculture practice. There is also a recognised lack of knowledge at a network level (i.e., PA co-ordination) about 'mainstream' agriculture networks and funds and relevant academic research networks.

How well equipped/competent are the actors and institutions to meet these needs?

PA and LAND are now trying to address these needs –if resources allow – including building stronger links and a better knowledge base of relevant mainstream agriculture networks.

To what extent is education, training and professionalization needed and provided?

How much priority does the LINSA assign to learning and identifying current and future learning needs?

Education and training is well developed within this LINSA. It is seen as a key priority and the LINSA is actively exploring links with the Learning College Network to accredit Permaculture courses. This links some Permaculture training courses to modules and courses taught in Higher Education Colleges. Most Permaculture courses would be Level 1 accredited (e.g. a certificate is mulching).

Key findings:

- A good deal of learning about Permaculture comes through practice. Training courses and other mechanisms help to formalise the process. The training courses and other events are highly coordinated, managed and formalised.
- The relationship between formal training and more tacit learning is complementary.
- Individuals very often extend their learning networks by seeking training and using a range of information sources outside of the PA network
- The knowledge and skills gaps are more generic business management skills rather than specific knowledge gaps related to Permaculture practice
- Education and training is well developed within this LINSA

GOVERNANCE

Method: 14 interviews with all PA community, PA and LAND members, 3 workshops with PA and LAND members.

How is the LINSA governed/managed?

LAND is a grant funded project within the Permaculture Association (PA). LAND has an Advisory Board (5 members, academics and practitioners) which specifically makes recommendations and assesses reports for the LAND project. The LAND network is a key part of the PA and is hard to separate from the PA governance and structure (see organisational figure (1) below). PA as a registered charity has a Board of Trustees which has three officers -Chair, Deputy-Chair, Treasurer and Secretary and three standing committees: Nominations; Finance; and Approval of Member Projects and Proposals. The Board are guided by the Policy Governance approach, which is based on the Carver Governance approach and sets out four main policies - organizational aims, board self-management, executive board relationships and executive limitations (PA, Board of Trustees Policy Manual). The Board monitors the CEO for PA and LAND operations. The PA also has a Research Advisory Board, an Education Advisory Group and a Diploma Advisory Group. The organisational structure for the LINSA is therefore quite well defined.

To what extent is the network governance inclusive/democratic?

The PA Board of Trustees is elected by PA members. Consultations with selected groups in the membership or other methods of gaining membership input are determined and arranged by the Board in each first quarter. The process of nomination and election of members for the LAND Advisory Board and other boards and working groups is not clear. The process for selection for the Research Advisory Board is under review in recognition that it is rather ad hoc. LAND aims to be inclusive in that it consults members (surveys etc.) and tries to act on their feedback; however, at the same time it has to meet funder requirements and targets.

To what extent is the LINSA institutionalised?

As described above, the LAND LINSA, and the parent body (the PA), are institutionalised to quite an extent with a number of governance structures in place. The PA is a registered charity and so is a legal entity. LAND is a funded project within the PA and the network to an extent has been created/imposed, using the funds to build a 'stronger network'. The process of formalising a previously diffuse network of practitioners has

meant that some degree of governance and control has been introduced, both to achieve the project aims and for funder accountability. Providing governance structures has meant that resources can be shared and action co-ordinated which was not possible before. There is an issue of member and staff 'ownership' of the LAND network as it was initiated by, and was the 'brainchild' of, the CEO of the PA.

How are communication, decision making, problem solving actioned?

The CEO (the same person for PA and LAND) is in charge on a day to day basis with respect to decision making, although he delegates some management responsibilities to other staff for the LAND LINSA. The number of advisory boards and working groups suggests that the Board and CEO are willing to delegate advisory aspects of the work to small teams. The PA aims to work according to the ethos of the Permaculture principals.

Do actors have sufficient skills/competencies for network governance?

There is nothing to indicate that the network governance is inadequate. The Board has good governance policies and conduct an annual self-appraisal in order to discipline itself and its efforts. Competent specialists sit on the Advisory boards and working groups.

Who has authority/control?

What are the power relations: inside LINSA and inside/outside LINSA. Who is excluded from the LINSA and why is he/she/they/it excluded?

The LAND Advisory Board (LAB) initiated eligibility criteria for entry into LAND. This made it quite difficult for some people to join so an intermediate layer was introduced of LAND learners who are 'apprentice' LAND centres. Most respondents in our research do not consider that the eligibility criteria are too restrictive, although there was one site that had difficulty in becoming a LAND centre as it was not a typical Permaculture site and the LAB were reluctant to let it join the network. However, on the whole, respondents do not regard the PA or LAND as authoritative, or controlling, although one or two have suggested that there is a core of purists who want to ensure that people adhere strictly to the Permaculture design principles. There is also a core of expert practitioners ('true believers' or 'old timers') who have power - due to their experience and qualifications, they are in a position to confer legitimacy on those practitioners who are still learning. This is done through the PA

training courses. Our research shows that most who visit LAND centres are practitioners (i.e. adopters) rather than new entrants (wider publics). To feel a part of LAND one needs to have knowledge and interest in Permaculture. It is not consciously exclusionary but reflects the niche content of the LINSA.

What are the different levels of governance?

The organisation is relatively flat. The CEO has the highest position and answers directly to the Board but otherwise there is little hierarchical structure. The ethos is one of joint responsibility and PA and LAND members appreciate the lack of hierarchy.

How does the governance approach affect network efficiency and /or effectiveness of the LINSA?

Provan and Kennis (2007) define network effectiveness as the attainment of positive network level outcomes that could not normally be achieved by individual organizational participants acting independently. In this sense, LAND, by virtue of bringing together a previously diffuse network of practitioners and providing a governance structure, has been more effective (in outreach, learning, networking and skill sharing) than the individual sites would have been if they acted independently of one another. According to the targets set at the beginning of the project LAND has been effective. In LAND there are some 50 centres which share a common goal and agree on the nature of the task, they interact on the basis of trust, sharing knowledge freely and have effective network and governance structures. However, once the project funding ends it is uncertain whether these structures will continue.

Key findings:

- LAND, as part of the PA, has strong governance structures
- LAND aims to be inclusive
- It is not particularly authoritative although some elements are powerful
- LAND governance is effective but possibly not sustainable

References:

Provan, K. and Kennis, P. 2007. Modes of Network Governance: Structure, Management, and Effectiveness. Journal of Public Administration Research and Theory 18:229–252

http://faculty.cbpp.uaa.alaska.edu/afgjp/PADM601%20Fall%202011/Modes%20of%20Network%20Governance.%202008.pdf

Figure 1: Diagram of PA and LAND organisational structure

LAND EFFECTIVENESS AND COST EFFICIENCY

Method: Document analysis, interviews and 3 workshops, as documented elsewhere.

What type of support does the LINSA use/look for?

- **External/ direct support/'hard' support measures - policy instruments and funding support, financial instruments etc. Who provides support? What is provided?**

LAND is a four year project (2009-2012). The Permaculture Association (PA) was awarded a grant of £273,000 from the Big Lottery Fund's Local Food Fund (LFF). The LFF is being match funded from the Esmée Fairburn Foundation, and the PA is also putting over £15,000 of its own funds into the project. There is funding from the LFF for a further year until Dec 2013 and this will be used to focus on how LAND can continue to operate after this date and be sustainable without funding. Support is for: networking, learning, outreach, volunteering and visits. LAND also funds 3 new and 4 existing part-time staff members including the PA CEO as LAND Coordinator, a Learning Coordinator and a Network Coordinator.

- *Internal/indirect/'soft' support - support they have received from each other, mentors, volunteers, facilitation, enhancing communication and linkage etc.*

In addition the PA has received £66,078.56 of 'In-Kind' contributions since the beginning of the LAND project from volunteers and supporters (a requirement of funding).

Effectiveness (impact) for all kinds of support discussed in the first question.

- *To what extent do the different types of support help the LINSA to achieve its goals? (or achieve innovation and learning?)*

Provan and Kennis (2007) define network effectiveness as the attainment of positive network level outcomes that could not normally be achieved by individual organizational participants acting independently. In this sense, LAND, by virtue of bringing together a previously diffuse network of practitioners and providing a governance structure, has been more

effective (in outreach, learning, networking and skill sharing) than the individual sites would have been if they acted independently of one another. According to the targets set at the beginning of the project LAND has been effective. In LAND there are some 50 centres, which share a common goal and have been selected by common criteria, agree on the nature of the task, they interact on the basis of trust, sharing knowledge freely and have effective network and governance structures. However, once the project funding ends it is uncertain whether these structures will continue. Although networking has been facilitated there is some dissatisfaction with some elements of LAND and people still feel 'unconnected'. Also interviews with LAND centres suggest that they have been successful at attracting those already interested in Permaculture but not successful in engaging with the pubic more generally.

- ***What are the benefits of the different types of support- in terms of outcome and outputs and how have these been measured?***

There are five main outcomes (in fact these are outputs) for the LAND project which have been agreed with the funders and progress is monitored against these –see Box:

NETWORK: Aim to create a publicly accessible Permaculture based learning and demonstration network with at least 80 land-based member projects (LAND centres). In year 3 there were 84 Projects - 45 LAND Centres and 39 LAND Learners.

LEARN: Aim to host 25 regional and national skill sharing and training events for new and existing practitioners. By year three there had been 30 events and a further 13 events planned. They are on-track to meet the target for 40 'Introduction to Permaculture' courses and a new teacher apprentice pathway has been developed. Target of 800 participants at 'Introduction to Permaculture' courses and presentations has been exceeded (in year three with 948) so now the aim for 1,200

OUTREACH: Aim to enable and support practitioners to deliver 40 introductory courses and 40 local presentations, with at least 800 attendees, this was achieved in year three.

VOLUNTEER: Aim to enable and support member projects to provide at least 1125 volunteer opportunities for local people and itinerant learners, this was exceeded in year three with a total of 6770 opportunities created.

VISIT: Aim to support 25 groups to visit LAND learning centres in year 2, year 3 and year 4, totalling 75 groups over three years. Achieved 65 at the end of year three and are on track to meet the target

All targets set by funders are being met or exceed, however as noted below there is more difficulty in evaluating the outcomes qualitatively.

- ***Who are the beneficiaries of different types of support? Individuals, a small group, a community, wider society?***

The beneficiaries include the PA, in that they have posts funded; the LAND centres and learners who get recognition and some support in attracting people to visit their sites; the intended beneficiaries are all practitioners as well as people new to Permaculture. The overall target for beneficiaries was 13,550 people, which was exceeded in year three with 23,767 beneficiaries. However how these figures are derived and who they specifically refer to is unclear.

- ***How long/how often has it taken to achieve any benefits from the different types of support? (Intensity of support)***

Figures suggest that in terms of outputs, targets set by funders had been reached within 3 years of funding, however assessing the outcomes of the longer term aims of improved learning and capacity building has not been possible.

- ***What would have happened without the different types of support?***

The LFF funding has enabled formalisation of a previously diffuse network of practitioners, allowing networking of isolated individuals, and learning opportunities to be increased. Without the project a number of people would have remained unconnected. LAND is a significant project within the PA and has provided staff funding, giving it a critical mass/capacity as well as more exposure. Arguably without funding the PA itself would have suffered, in that it would have remained small and stagnant. The PA has also been a platform for growth, it helped to set up PA Scotland and Wales.

- ***Are the different types of support evaluated (externally or internally)? How? In terms of outcome and outputs? Have any indicators/criteria of effectiveness been used?***

There has been an external evaluation by the LFF and criteria were framed around project aims, project themes, legacy and additionality. This was a favourable evaluation but noted the difficulty in finding suitable criteria, as, although the project is about establishing a new demonstration network, which can be enumerated, it is also concerned with quality of knowledge, teaching skills and provision of experiences for

volunteers which is not easy to quantify. LAND emphasises setting up a learning network which can be low-cost and self-sustaining and focuses on train the trainer and increasing the quality and capacity of its educational outreach and communication – again measuring the success of this 'legacy' approach is not easy to determine. There is internal monitoring and evaluation (M&E) against the funder targets. The monitoring information pack sent to LAND learning centres is designed to ascertain how many visitors have been to the projects and how many volunteer opportunities have been created as a result of the LAND project (numbers above). This evaluation pointed out that LAND's internal monitoring was 'all about the money, not about the outcomes' meaning that there was too much focus on quantifying outputs by way of justifying the funds spent rather than looking at long term qualitative outcomes.

As part of M&E, LAND conducted a series of Surveys of LAND centre participants. Results from the LAND Next-Steps Survey:

What Aspects of the LAND Project Have Been Most Useful To You?
All aspects were rated equally

Has being involved with the LAND Project given you more confidence to apply Permaculture ethics and principles? 30% very confident, 30% quite confident, 40% either neutral or a little bit confident

What would you say is the main benefit of the LAND project? Answers included**:** Inspiration, practical support, making it possible to welcome visitors (including group visits) and volunteers

What single thing would make the biggest improvement to the LAND project? Responses included: More marketing done centrally – they were pleased to be awarded LAND status (a seal of approval) but have been disappointed in the lack of group visits; a more interactive website; a regional focus (clusters and Regional co-ordinators)

What additional support would help your project to develop? Responses included**:** More help with marketing and more information about projects on the LAND website; greater connection amongst LAND Centre and Local Group; more publicity; an annual visit from a PA/LAND rep. to review and plan ahead

How Would You Rate Your Experience Overall? 80% excellent, 20% good

This high level of satisfaction was not reflected in SOLINSA workshops and interviews which revealed some criticism and dissatisfaction. There

is a disjuncture between the rhetoric (and the figures prepared for funders) and the reality of the LAND centre experience.

Cost efficiency

- ***Is the level of support commensurate with the benefits derived? In your opinion or in the opinion of the LINSA members***?

LAND aims to be self-sustaining; the 4 year period of funding was intended to establish a network which could sustain itself. In this respect the intended benefits could have justified the funding, however in reality the benefits have been more piecemeal and capacity still needs to be built and supported. As such LAND is still reliant on grant funding to operate.

- ***Is the support beneficial for some groups (LINSA members only) but not for others (e.g. society)?***

Access to LAND benefits is nominally equitable, although some LAND centres which are projects seem to be able to derive more benefits (as they are more able to use group visits, etc.), whereas individuals and LAND learners complain of not having enough time or resources to use all the benefits on offer. Public engagement seems poor.

- ***Has there been any attempt to evaluate the cost efficiency of the support? How? What outcome?***

No

- **What are the costs to the LINSA of seeking support - do they spend a lot of time/resources looking for support? Is this an effective use of their time?**

Yes, the LAND team/CEO spend time both in justifying current funding through M&E and in seeking future support funds. Also the centres were quite overwhelmed by the requirements regarding monitoring and reporting.

Key findings:

- Although it aims to be self-sustaining, in reality LAND is reliant on grant funding to operate

- Evaluation criteria need to be concerned with the quality of knowledge exchange, teaching and learning experiences of those taking part. To date there has been a focus on numbers of sites established, visitor numbers and activities

Further reading

Provan., K and Kennis, P. 2007 Modes of Network Governance: Structure, Management, and Effectiveness. Journal of Public Administration Research and Theory 18:229–252

http://faculty.cbpp.uaa.alaska.edu/afgjp/PADM601%20Fall%202011/Modes%20of%20Network%20Governance.%202008.pdf

LINKS TO THE AKIS

Methods:

This report draws on interviews and workshops with LAND and Permaculture Association (PA) LINSA actors, and observation at 2 meetings of the Permaculture Association (PA) Research Advisory Board. It also refers to a workshop held with members of the wider agro ecological community entitled: *Agro-ecological and conventional food production knowledge systems: making the connections to enhance innovation and learning.* Participants included representatives from: the LINSA (LAND), other agro ecological organisations and more mainstream agricultural knowledge providers. This is referred to as the Connections workshop in the text below.

LINSA connections with the formal AKS system

- ***What are the LINSA connections with the formal AKIS system? Formal or informal connections at individual or institutional level? Do they use AKS research? Advisory services? Education and training?***

Although the Permaculture community is diverse and individuals use a wide range of information sources they tend to engage principally with those in the same 'alternative' social learning system (e.g. the Agroforestry Trust, the Soil Association, Centre for Alternative Technology, and local transition groups). As such their horizons are limited and only extend to the fringes of the conventional AKIS. The PA themselves liaise at a different level working with other national and international PAs, and similar organizations as well as like-minded academics but have limited links with mainstream AKIS. Notably none of the LAND/PA actors seem to be familiar with mainstream AKIS research, advisory or educational organisations.

Views from the wider agro ecological community expressed in the Connections workshop suggest that there are initiatives where some form of connection/boundary spanning was on-going (particularly in the case of organic farming). This is attributed to agro ecology becoming more popular/acceptable (some of the practices are now more mainstream). However the connections listed at the workshop include those mostly outside the mainstream AKIS: Real Farming conference; Organic Growers Alliance; Biodynamic farming network; All Party Parliamentary Group on Agro-ecology (APPG), Regenerative Agriculture (RA). The last, RA, provide training at the producer level and are crossing boundaries by appealing to alternative, Permaculture and mainstream farmers.

- ***What are the opportunities for connection to the AKIS? Do they engage in any joint activities/ partnerships with AKIS? Are there boundary organizations? Brokers? Spanners?***

Research proposals have been prepared jointly with some academics sympathetic to agro ecological systems, rather than mainstream ones. The CEO of the PA and members of the PA Education and Research boards themselves act as boundary spanners and ambassadors for Permaculture and interact informally with like-minded people at conferences, workshops, etc.

With respect to opportunities, the Connections workshop considered forces that enable the agro ecological and conventional knowledge systems to connect. Market competition is seen as important since farmers facing financial constraints are looking for more cost effective and possibly agro ecological ways to produce food (although market competition was also regarded as a force that constrains integration of the two KSs). The growth the consumer interest is seen to be important in enabling connections between the two KSs as more farmers use agro ecological practices as they respond to consumer demands for 'sustainably' produced food. Also increased activity in: agri-environment programmes, legume and manure management, soil protection and paying for ecosystem services provide opportunities for connections between the two KSs since many of these practices/activities are operating/promoted in both KSs. The positive environmental behaviour of farmers prompted by peer pressure, and more opportunities for learning together is regarded as helping synergy between the KSs. A better research base and the activity of boundary spanners in particular in connecting research to practice are seen as enabling communication. Finally, shared problems and goals and recognition of the need for a more joined up approach are seen as positive enabling forces. Financial demands of farming mean that some agro ecological practices are appealing more to mainstream farmers, e.g. the cost saving side often draws people in from both sides in Regenerative Agriculture (e.g. grazing courses); this is an important bridge and described as an "issue" spanner, rather than a personal spanner, that brings people together.

- ***What are the barriers for connection to the AKIS? Lack of familiarity? Irrelevant knowledge? Access issues? Different language? Different value system? Absence of common means of validating knowledge claims?***

For LAND/PA, strong internal ties within the Permaculture community together with views of some 'purists' suggests a tendency for it to be

inward looking and gives the perception of being inaccessible from the outside. Equally the significance given to the knowledge generated and circulated within the community, particularly tacit or 'unspoken' knowledge, means that communication with more formal learning systems is limited.

Barriers were considered at the Connections workshop in terms of forces that constrain the two KSs connecting. The following key points were noted:

- The nature of research funding and agendas described as short-term and skewed towards high-tech solutions was seen as a barrier. Associated with this comes the privatisation of knowledge, which limits access to those concerned with commercial (and academic) research. Economic drivers and market competition are linked to research funding issues, since the research agenda responds to economic drivers and market competition.
- Poor communication between the KSs is seen as a barrier. In connection with this, a lack of funding for facilitation was regarded as restricting the opportunity for sharing knowledge between peers and between KSs.
- Separate belief systems are considered a fundamental barrier to connecting KSs. The belief/value system which underpins current research agendas in mainstream KS, and the associated view of what constitutes credible knowledge, restricts linkages with the agro ecological KS, which is underpinned by different values and understandings of what constitutes valued knowledge.
- Misconceptions and misunderstanding between the KSs is a further barrier enhanced by the image of those practicing agro ecology. Allegiance to those who share the same beliefs and values (and have the same external image) is regarded as limiting connections.
- Sustainable intensification was mentioned as the dominant conventional agriculture discourse – current (bioscience/techno-centric) interpretations of this term are seen as a barrier to integrating agro ecology.
- Language and terminology can also be a barrier to communication and understanding, although sometimes perception (due to misunderstanding) of difference is greater than the reality.
- Finally, there is a set of constraining forces covering wider issues such as a narrow focus on food production and a lack of integration of other elements in the system (e.g. people and energy).

Significance/relevance of the AKIS to the LINSA

- *How effectively does the conventional AKIS meet the needs of the LINSA? Do they provide relevant information? Does it meet emerging needs for knowledge and skills in the LINSA?*

The AKIS does not meet the LAND/PA actors' needs and the PA structures have emerged to meet needs of practitioners and as a result the AKIS is seen by most as irrelevant.

For the wider agro ecological community it was felt that the conventional AKIS cannot meet the needs of agro ecological practitioners without some modification, due to the different underlying belief systems. Also knowledge required for agro ecology is different from mainstream agricultural knowledge; it needs to be relevant to a local context and to address more complex problems. For many in the agro ecological system the content of the AKIS may need modification –the agro ecology community does not respond well to the types of AKIS structure and formal and codified knowledge it produces.

- *Does the LINSA want to connect to the AKIS? Or are they already getting sufficient support/knowledge from elsewhere?*

The Permaculture Association see value in making connections to some elements of the AKIS, in particular to tap into research funding opportunities.

- *How important/relevant is the AKIS to the LINSA? Are there other knowledge systems which are more relevant e.g. health care, energy, food justice?*

Some conventional research can be helpful and relevant for agro ecology and organic farming. For LAND/PA there are other KSs which are more relevant. Permaculture is part of a wider agro ecology KS or network which provides information and support.

- *How does the LINSA value or judge the AKIS? What is important to the LINSA when they look for information (scientific credibility, inspiration, validation of their own knowledge and beliefs)?*

LAND/PA want to establish an evidence base for Permaculture and are looking to legitimise the practice through peer reviewed publications. In this sense they value some elements of the AKIS (scientific credibility) and are looking for validation. They are also aiming to connect to the academic agro ecological community through links with academics and

societies (BES). However they are looking in terms of what they can contribute from a Permaculture perspective rather than seeing what they can learn. They have a research strategy, a research advisory board with a mix of academics, and a training programme and education strategy, so in that respect they have copied formal structures from AKIS. Access to knowledge from AKIS was raised, for example access to academic papers is restricted.

At the Connections workshop it was felt that there is a challenge in getting the academic world to value local / anecdotal / tacit knowledge. It was suggested that the two KSs are not covering the same ground, although they can learn from each other, they are different systems with different perspectives.

- ***What are the views of the AKIS representatives? Does the AKIS need LINSA? How to they value LINSA?***

At the Connections workshop it was felt that the KS does not appreciate that it needs the agro ecology KS. However, it seems agro ecology is becoming more important but often 'those in the conventional system 'won't admit it'. There is some 'cherry picking going on' - for example, some ideas from agro ecology are taken up but the full idea / concept is not embraced. Farmers – especially small scale farmers – are having to look for alternatives so are now looking towards agro ecology - the 'spanner' for connection may be economics – farmers will adopt / listen if it helps to make the farm enterprise more financially viable. However, when it comes to practicing Permaculture, 'one needs positive intention and direction to farm ecologically'.

Key findings:

- There is limited linkage between the LAND/PA KS and the mainstream AKIS, it is not seen as relevant as the PA KS has emerged to meet the needs of the LINSA.
- Barriers to connections include: different value systems, image, allegiance, language, different views on credible knowledge, market competition, research agendas, access issues, commodification of knowledge, and the inward looking nature of Permaculture.
- Opportunities include: farmers seeking cost cutting options mean that some agro ecological practices are more appealing; agro ecology becoming more acceptable, the policy context means that

agro ecological practices will become more familiar, KSs deal with common problems and goals, more partnership opportunities.

- Knowledge tends to circulate in closed systems but there is some interaction and boundary spanning occurring; however, the PA is seeking to validate and promote Permaculture rather than learn from the AKIS.